

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (previously presented) In an agricultural harvester having a crop processing unit comprising an axial rotor having an axis of rotation and a housing, the rotor comprising:

    a drum having a rearward cylindrical portion and a forwardly extending frusto-conical portion, the surface of the frusto-conical portion comprising an aft-region adjacent to the rearward cylindrical portion of the drum, and a fore-region;

    an infeed section for receiving harvested crop material, the infeed section having at least one infeed element located on the fore-region of the frusto-conical portion of the drum, each infeed element having a forward portion and a rearward portion, the forward portion having an outer edge that is forward swept in a direction of rotation of the drum, the rearward portion of the infeed element having an outer edge that is forward swept on a front thereof, the rearward portion of the infeed element transitioning such that the outer edge is rearward swept on a rear thereof;

    a threshing section for processing harvested crop material received from the infeed section of the rotor, the threshing section having at least one threshing element located on the aft-region of the frusto-conical portion of the drum, the threshing element having a crop engaging portion that is parallel to the axis of rotation; and

    wherein the rear of the rearward portion of the infeed element and the threshing element are secured to an infeed element attachment feature for directing the harvested crop material from the rearward portion of the infeed element directly onto a crop engaging portion of the threshing element.

2. (previously presented) The rotor described in Claim 1 wherein the crop engaging portion of the threshing element of the crop processing section sweeps a cylindrical path upon rotation of the rotor.

3. (Cancelled)
4. (previously presented) The rotor described in Claim 1 wherein the infeed element is a helical infeed flight.
5. (previously presented) The rotor described in Claim 1 having at least a second threshing element located on the rearward cylindrical portion of the drum.
6. (previously presented) The rotor described in Claim 5 wherein the threshing element of the crop processing section sweeps a cylindrical path upon rotation of the rotor.

7 - 15. (canceled)

16. (previously presented) An axial rotor for a crop processing unit in an agricultural harvester, the rotor having an axis of rotation and a housing, the rotor comprising:

a drum having a rearward cylindrical portion and a forwardly extending frusto-conical portion, the surface of the frusto-conical portion comprising an aft-region adjacent to the rearward cylindrical portion of the drum, and a fore-region;

an infeed section for receiving harvested crop material, the infeed section having at least one infeed element located on the fore-region of the frusto-conical portion of the drum each at least one infeed element having a forward portion and a rearward portion, the forward portion having an outer edge that is forward swept in a direction of rotation of the drum, the rearward portion of the infeed element having an outer edge that is forward swept on a front thereof, the rearward portion of the infeed element transitioning such that the outer edge is rearward swept on a rear thereof;

a threshing section for processing harvested crop material received from the infeed section of the rotor, the threshing section having a plurality of first threshing elements located on the aft-region of the frusto-conical portion of the drum and positioned in a staggered pattern on the frusto-conical portion, each first threshing element having a crop engaging portion that is parallel to the axis of rotation,

the threshing element and a rear of the rearward portion of the infeed element secured to an infeed element attachment feature for directing the harvested crop

material from the rearward portion of the infeed element directly onto a crop engaging portion of the threshing element, wherein the infeed element and the first threshing element are helically orientated and are helically aligned on the frusto-conical portion

and having a plurality of second threshing elements located on the rearward cylindrical portion of the drum.

17. (canceled)

18. (previously presented) The rotor described in Claim 16 wherein the infeed element is a helical infeed flight.

19. (previously presented) The rotor described in Claim 16 wherein the staggered pattern of first threshing elements of the threshing section sweeps a cylindrical path upon rotation of the rotor.

20. (canceled)